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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/916,928 | 07/27/2001 | David H. Levy | 13159-004001 | 9129 |

26161 7590 05/27/2004

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

CHOW, DOON Y

| ART UNIT | PAPER NUMBER |
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2675

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DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,928

Applicant(s)

LEVY ET AL.

Examiner

Dennis-Doon Chow

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 58-61 and 67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 58-61 and 67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-14, 58-61 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapeyre (4994992) in view Furuhata et al. (5943043).

Lapeyre discloses a keyboard, comprising: a tactile feedback means; a matrix of key regions which includes interstitial key regions and raised key regions (Fig. 2); means for activating the key regions; means for scanning the matrix for activated keys (Fig. 1); and means for providing an output to the user in response to the activation of the keys.

Lapeyre does not disclose activating an adjacent key region prior to release of a first activated key region.

Furuhata discloses a versatile input device for inputting data signal to a display system comprises a plurality of input regions. Furuata further discloses activating a first activated region, and an adjacent region before the release of first activated region within a predetermined time period (see Abstract). In response to the activation of the adjacent region, the device provides a final output to the user.

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It would have been obvious to one ordinary skill in the art to use Furuhata's activation means in Lapeyre's keyboard. This would have been obvious because Furuhata's activation means allows the keyboard to output more data with the same number of key regions.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lapeyre in view of Furuhata et al. as applied to claims 1-5, 7-14 and 58-61 above, and further in view of Ahmadian (5914677).

The modified Lapeyre does not disclose driving two adjacent rows simultaneously and seeking for two simultaneous output columns.

Ahmadian, in the same input field, discloses an apparatus and a method for scanning a keyboard device. Ahmadian further discloses scanning multiple adjacent rows simultaneously and seeking for multiple simultaneous output columns (see Abstract).

It would have been obvious to one of ordinary skill in the art to use Ahmadian's scanning means in the keyboard device of the modified Lapeyre to scanning two adjacent row simultaneously and seeking for two simultaneous output columns. This would have been obvious because the speed of scanning the keyboard device can be improved by scanning multiple adjacent rows simultaneously.

Response to Arguments

4. Applicant's arguments filed 2/25/04 have been fully considered but they are not persuasive.

Applicant argues that Furuata provides no insight into helping to resolve overlapping activation of adjacent keys or key regions of the type of keypad shown in Lapeyre. Applicant further argues that nothing in the proposed combination of Lapeyre and Furuata supplies the feature of first providing provisional output to a user indicating that the activated key region has been registered, and then, in response to activation of an adjacent key region prior to release of the first activated key region, providing a final output to the user to the exclusion of the provisional output.

The examiner respectfully disagrees with applicant's arguments. Furuata, in the Abstract and the Figures 1A-1C, discloses activating a first key region to provide a provisional output, activating an adjacent key region prior to release of the first activated key region, and providing a final output to the user in response to the activation of the adjacent key region prior to release of the first activated key region. It is clear that the combination Lapeyre and Furuata teach the claimed limitations as argued by the applicant.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 703-305-4398. The examiner can normally be reached on 8:30-6:00, Alternate Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached on 703-305-9720. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

D. Chow
May 25, 2004


DENNIS-DOON CHOW
PRIMARY EXAMINER